



STIC Search Report

EIC 1700

STIC Database Tracking Number: 205259

TO: Rip A Lee
Location: Remsen 10a24
Art Unit : 1713
October 25, 2006
Phone: 571-272-1104
Serial Number: 10 / 524216

From: Jan Delaval
Location: EIC 1700
Remsen 4a30
Phone: 571-272-2504
jan.delaval@uspto.gov

Search Notes

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: LEE, RJP A. Examiner #: 78080 Date: October 11, 2006
 Art Unit: 1713 Phone Number: 302-1104 Serial Number: 10/524,216
 Mail Box and Bldg/Room Location: REM 10A24 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: AQUEOUS POLYMER DISPERSIONS

Inventors (please provide full names): please see S. Sig. copy, attached

Earliest Priority Filing Date: AUG 29, 2002

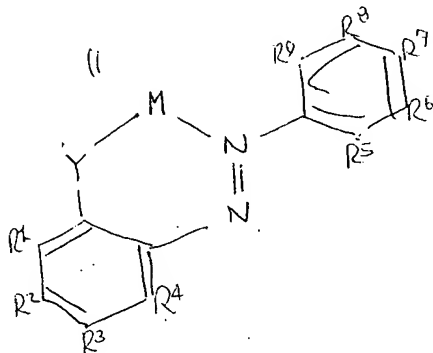
SCIENTIFIC REFERENCE BR
Sci & Tech Inf. Cntr.

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

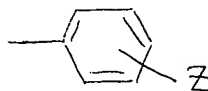
OCT 20 RECD

Pat. & T.M. Office

Please search for compounds of formula



- M is Gp 8-10
- Y is O, N
- at least one of R¹-R⁹ is



Z is SO₃H, SO₃Na
 NO₂
 F
 CF₃

please contact me if you have
 questions or need to
 refine search strategy

STAFF USE ONLY

Searcher: [Signature]
 Searcher Phone #: 22504
 Searcher Location: _____
 Date Searcher Picked Up: 10/26/04
 Date Completed: 10/26/06
 Searcher Prep & Review Time: _____
 Clerical Prep Time: 15
 Online Time: +30

Type of Search

NA Sequence (#) _____
 AA Sequence (#) _____
 Structure (#) ✓
 Bibliographic _____
 Litigation _____
 Fulltext _____
 Patent Family _____
 Other _____

Vendors and cost where applicable

STN ✓
 Dialog _____
 Questel/Orbit _____
 Dr. Link _____
 Lexis/Nexis _____
 Sequence Systems _____
 WWW/Internet _____
 Other (specify) _____

=> fil reg

FILE 'REGISTRY' ENTERED AT 16:06:32 ON 25 OCT 2006

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STRUCTURE FILE UPDATES: 24 OCT 2006 HIGHEST RN 911193-70-9

DICTIONARY FILE UPDATES: 24 OCT 2006 HIGHEST RN 911193-70-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

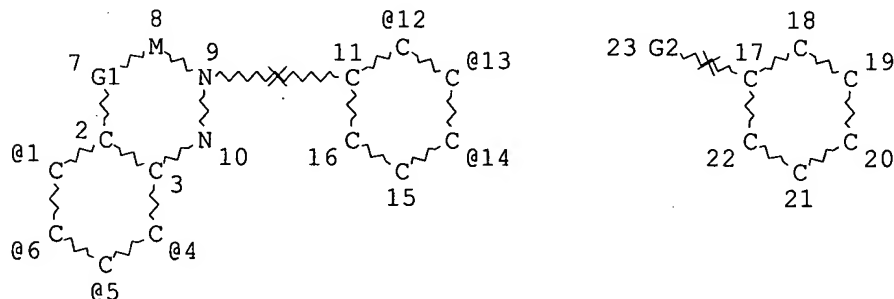
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=> d sta que 130

L24 STR



VAR G1=O/N/P

VAR G2=1/6/5/4/12/13/14

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

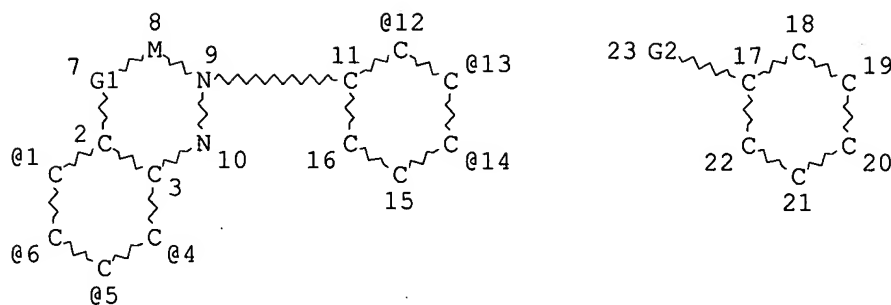
RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 23

STEREO ATTRIBUTES: NONE

L26 625 SEA FILE=REGISTRY SSS FUL L24

L28 STR



VAR G1=O/N/P
 VAR G2=1/6/5/4/12/13/14
 NODE ATTRIBUTES:
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 23

STEREO ATTRIBUTES: NONE
 L30 24 SEA FILE=REGISTRY SUB=L26 SSS FUL L28

100.0% PROCESSED 58 ITERATIONS
 SEARCH TIME: 00.00.01

24 ANSWERS

=> d his

(FILE 'HOME' ENTERED AT 15:38:58 ON 25 OCT 2006)
 SET COST OFF

FILE 'HCAPLUS' ENTERED AT 15:39:10 ON 25 OCT 2006

L1	1 S US20050250920/PN OR (US2005-524216# OR WO2003-EP8091 OR DE200
	E CHOWDHRY/AU
	E CHOWDHRY M/AU
L2	27 S E5-E7
	E MUBARIK/AU
	E MAHMOOD/AU
	E MAHMOOD C/AU
	E MAHMOOD M/AU
L3	28 S E3
	E SCHMID/AU
	E SCHMID/AU
L4	9 S E3
	E SCHMID M/AU
L5	526 S E3-E15, E30-E32
	E PREISHUBER/AU
L6	27 S E4, E7-E12
	E PREISHUEBER/AU
	E PFLUGL/AU
	E SAVA/AU
	E SAVA X/AU
L7	23 S E4
	E WEISS/AU

L8 17 S E3
 E WEISS H/AU
 L9 624 S E3-E19
 E WEISS HORST/AU
 L10 67 S E3
 E WEISS HOERST/AU
 E MECKING/AU
 L11 95 S E24,E27,E28
 E ZUIDEVELD/AU
 L12 21 S E7-E9
 E BAUERS/AU
 L13 18 S E5-E7
 L14 63 S L2-L13 AND BASF?/PA,CS
 E GROUP VII/CT
 E E16+ALL
 L15 8085 S E13+OLD,NT
 E GROUP VIII/CT
 E E35+ALL
 L16 172470 S E13+OLD,NT
 E GROUP VII/CT
 L17 1124 S GROUP VIIB?/CT
 L18 7115 S GROUP VIII?/CT
 L19 44 S L1-L14 AND L15-L18
 L20 17 S L14 AND L19
 L21 90 S L1,L14,L19,L20

FILE 'REGISTRY' ENTERED AT 15:47:24 ON 25 OCT 2006

FILE 'HCAPLUS' ENTERED AT 15:47:24 ON 25 OCT 2006

L22 TRA L21 1- RN : 793 TERMS

FILE 'REGISTRY' ENTERED AT 15:47:27 ON 25 OCT 2006

L23 793 SEA L22
 L24 STR
 L25 3 S L24
 L26 625 S L24 FUL
 SAV TEMP L26 LEE524/A
 L27 0 S L23 AND L26
 L28 STR L24
 L29 1 S L28 SAM SUB=L26
 L30 24 S L28 FUL SUB=L26
 SAV L30 TEMP LEE524A/A
 E A/PG
 L31 11 S E19,E20 AND L30
 L32 601 S L26 NOT L30
 L33 24 S E19,E20 AND L32
 L34 35 S L31,L33
 L35 35 S L26 AND (MN OR TC OR RE OR FE OR RU OR OS OR CO OR RH OR IR O
 L36 35 S L34,L35
 L37 13 S L30 NOT L36
 L38 577 S L26 NOT L36,L37

FILE 'HCAPLUS' ENTERED AT 15:55:53 ON 25 OCT 2006

L39 13 S L36
 L40 242 S L38
 L41 0 S L39 AND L1-L14
 L42 0 S L40 AND L1-L14
 L43 0 S L39 AND BASF?/PA,CS
 L44 2 S L40 AND BASF?/PA,CS
 E OLEFIN/CT

L45 5704 S E15+ALL
 S E2+OLD,NT
 E OLEFIN/CT
 E E18+ALL
 L46 105 S E3+OLD
 E OLEFINIC/CT
 E E10+ALL
 L47 24289 S E1
 E E2+ALL
 L48 510092 S E7+NT
 E E8
 L49 5404 S E42-E55
 E POLYOLEFIN/CT
 E POLYOLEFINS/CT
 E E3+ALL
 L50 588150 S E8+OLD,NT
 E E123+ALL
 L51 10714 S E4+OLD,NT
 L52 2 S L39 AND L45-L51
 L53 20 S L40 AND L45-L51
 SEL RN L1

FILE 'REGISTRY' ENTERED AT 16:02:15 ON 25 OCT 2006

L54 9 S E1-E9
 L55 1 S L54 AND CCS/CI

FILE 'HCAPLUS' ENTERED AT 16:04:38 ON 25 OCT 2006

L56 3 S L30
 L57 1 S L55
 L58 1 S L56,L57 AND L1-L14
 L59 1 S L56,L57 AND BASF?/PA,CS
 L60 2 S L56-L59 AND L45-L51
 L61 3 S L56-L60 AND (PY<=2002 OR PRY<=2002 OR AY<=2002)
 L62 1 S L56,L56 NOT L61

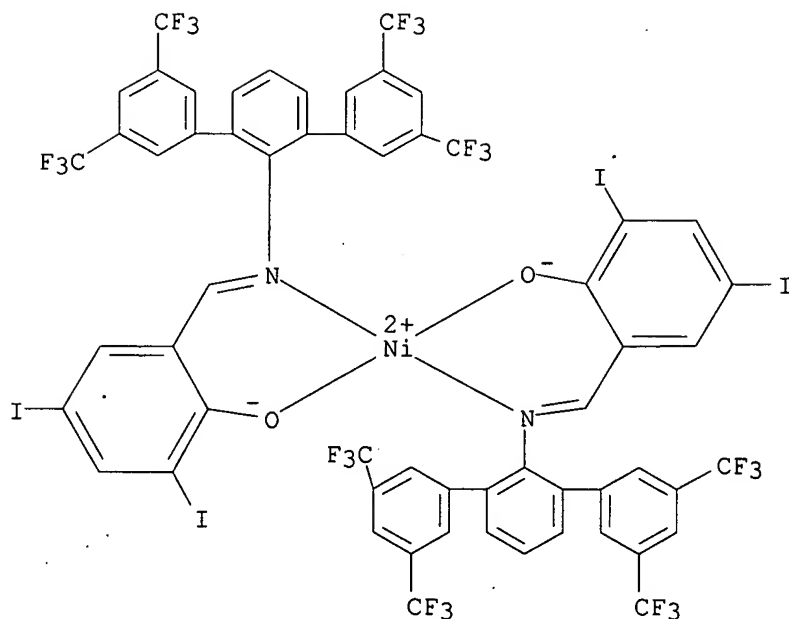
FILE 'USPATFULL' ENTERED AT 16:06:18 ON 25 OCT 2006

L63 2 S L30 OR L55

FILE 'REGISTRY' ENTERED AT 16:06:32 ON 25 OCT 2006

=> d ide can 155

L55 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN
 RN **667938-71-8** REGISTRY
 ED Entered STN: 26 Mar 2004
 CN Nickel, bis[2,4-diiodo-6-[[[3,3'',5,5''-tetrakis(trifluoromethyl)[1,1':3',
 1''-terphenyl]-2'-yl]imino-κN)methyl]phenolato-κO]- (9CI) (CA
 INDEX NAME)
 MF C58 H24 F24 I4 N2 Ni O2
 CI **CCS**
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:236209

=> fil uspatful

FILE 'USPATFULL' ENTERED AT 16:06:52 ON 25 OCT 2006

CA INDEXING COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 24 Oct 2006 (20061024/PD)

FILE LAST UPDATED: 24 Oct 2006 (20061024/ED)

HIGHEST GRANTED PATENT NUMBER: US7127745

HIGHEST APPLICATION PUBLICATION NUMBER: US2006236437

CA INDEXING IS CURRENT THROUGH 24 Oct 2006 (20061024/UPCA)

ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 24 Oct 2006 (20061024/PD)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2006

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2006

=> d bib abs hitstr tot 163

L63 ANSWER 1 OF 2 USPATFULL on STN

AN 2005:287654 USPATFULL

TI Preparation of aqueous polymer dispersions

IN Chowdhry, Mubarik Mahmood, Strasbourg, FRANCE

Schmid, Markus, Deidesheim, GERMANY, FEDERAL REPUBLIC OF

Preishuber-Pflugl, Peter, Ludwigshafen, GERMANY, FEDERAL REPUBLIC OF

Sava, Xavier, Mannheim, GERMANY, FEDERAL REPUBLIC OF

Weiss, Horst, Neuhofen, GERMANY, FEDERAL REPUBLIC OF

Mecking, Stefan, Freiburg, GERMANY, FEDERAL REPUBLIC OF

Zuideveld, Martin, Freiburg-Tiengen, GERMANY, FEDERAL REPUBLIC OF

Bauers, Florian M., Freiburg, GERMANY, FEDERAL REPUBLIC OF

PI US 2005250920 A1 20051110

AI US 2003-524216 A1 20030724 (10)

jan delaval - 25 october 2006

WO 2003-EP8091

20030724

20050210 PCT 371 date

PRAI DE 2002-10240577

20020829

DT Utility

FS APPLICATION

LREP OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C., 1940 DUKE STREET,
ALEXANDRIA, VA, 22314, US

CLMN Number of Claims: 20

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1159

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A process for preparing aqueous polymer dispersions by polymerizing one or more olefins in an aqueous medium in the presence of dispersants and, if desired, of organic solvents comprises catalyzing the polymerization of said olefin(s) using one or more metal complex compounds of the formula I ##STR1## where at least one of the radicals R.sup.1 to R.sup.9 is necessarily in the form of a radical of the formula II below ##STR2## where Z is an electron-withdrawing group and n is an integer from 1 to 5.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

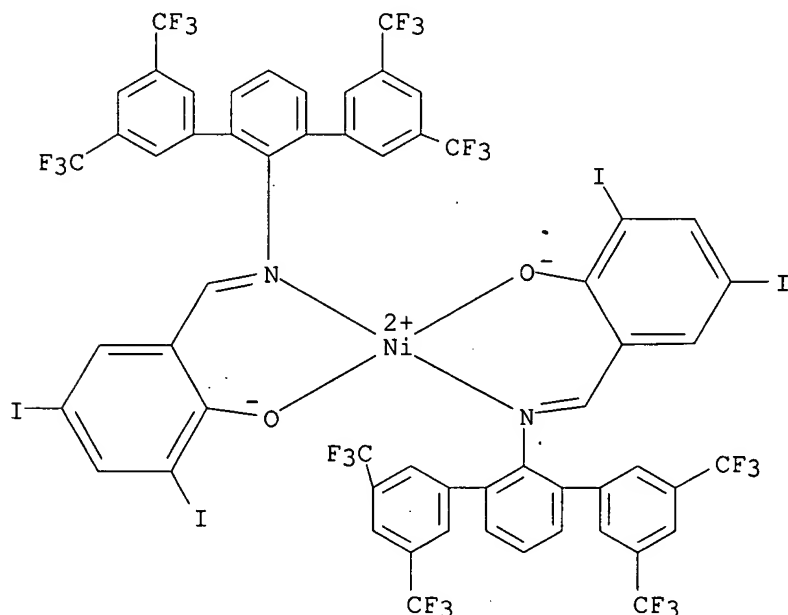
IT 667938-71-8P

(production of aqueous polyolefin dispersions by polymerization of olefins in presence

of transition metal complexes of azo or azomethine compds.)

RN 667938-71-8 USPATFULL

CN Nickel, bis[2,4-diiodo-6-[[[3,3'',5,5''-tetrakis(trifluoromethyl)[1,1':3',1''-terphenyl]-2''-yl]imino-κN]methyl]phenolato-κO]- (9CI)
(CA INDEX NAME)



L63 ANSWER 2 OF 2 USPATFULL on STN

AN 2004:240192 USPATFULL

TI Monometallic azo complexes of late transition metals for the

polymerization of olefins
 IN Weiss, Thomas, Mannheim, GERMANY, FEDERAL REPUBLIC OF
 PI US 2004186007 A1 20040923
 US 7098165 B2 20060829
 AI US 2004-768291 A1 20040130 (10)
 PRAI DE 2003-10304158 20030203
 DT Utility
 FS APPLICATION
 LREP BAYER MATERIAL SCIENCE LLC, 100 BAYER ROAD, PITTSBURGH, PA, 15205
 CLMN Number of Claims: 17
 ECL Exemplary Claim: 1
 DRWN No Drawings
 LN.CNT 1541

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to compounds of transition metals with azo ligands, a process for their production, the use of these compounds as catalysts, a process for olefin (co)polymerization using these compounds, reaction products of these compounds with co-catalysts, the olefin (co)polymer, the use of these olefin (co)polymers for the production of molded parts, as well as molded parts that are produced from the olefin (co)polymers.

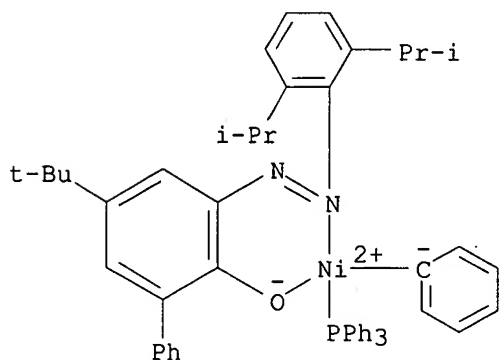
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 732286-00-9P

(preparation of monometallic azo complexes of late transition metals for the polymerization of olefins)

RN 732286-00-9 USPATFULL

CN Nickel, [3-[[2,6-bis(1-methylethyl)phenyl]azo-κN2]-5-(1,1-dimethylethyl)[1,1'-biphenyl]-2-olato-κO]phenyl(triphenylphosphine)- (9CI) (CA INDEX NAME)



=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 16:07:05 ON 25 OCT 2006

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FILE COVERS 1907 - 25 Oct 2006 VOL 145 ISS 18
FILE LAST UPDATED: 24 Oct 2006 (20061024/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d 162 bib abs hitstr retable

L62 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:631256 HCAPLUS

DN 141:174614

TI Monometallic azo complexes of late transition metals for the polymerization of olefins

IN Weiss, Thomas

PA Bayer AG, Germany

SO Ger. Offen., 25 pp.

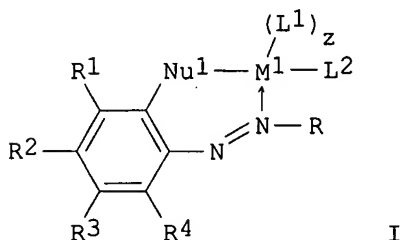
CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10304158	A1	20040805	DE 2003-10304158	20030203
	EP 1454926	A1	20040908	EP 2004-1164	20040121
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	CA 2456518	AA	20040803	CA 2004-2456518	20040130
	US 2004186007	A1	20040923	US 2004-768291	20040130
	US 7098165	B2	20060829		
	JP 2004238395	A2	20040826	JP 2004-25253	20040202
PRAI	DE 2003-10304158	A	20030203		
OS	MARPAT 141:174614				
GI					



AB The title azo complexes have the formula I, where Nu1 = O, S, Se, PRa, NRa or COO; Ra = H, alkyl or aryl group; R, R1, R2, R3 and R4 = H, halogen, substituted or unsubstituted C1-8 alkyl, C2-8 alkenyl, C3-12 cycloalkyl, C7-13 arylalkyl or C6-14 aryl group; M1 = a group 4-12 element, such as Ti, Zr, Cr, V, Fe, Co, Ni, Pd, Cu or Zn; L1 = a neutral ligand, such as

PPh₃; L₂ = an anionic ligand, such as Me, Ph and z = 1-2. The complexes can be used as catalysts for (co)polymerization of olefins and polar olefins.

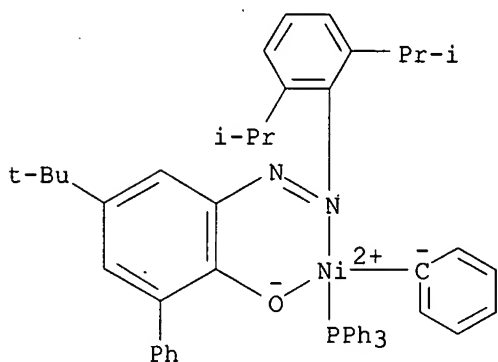
IT 732286-00-9P

RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation);
USES (Uses)

(preparation of monometallic azo complexes of late transition metals for the polymerization of olefins)

RN 732286-00-9 HCAPLUS

CN Nickel, [3-[[2,6-bis(1-methylethyl)phenyl]azo-κN₂]-5-(1,1-dimethylethyl)[1,1'-biphenyl]-2-olato-κO]phenyl(triphenylphosphine)-(9CI) (CA INDEX NAME)



=> d 161 bib abs hitind hitstr retable tot

L61 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:198241 HCAPLUS

DN 140:236209

TI Procedure for the production of aqueous polymer dispersions by polymerization of olefins in the presence of transition metal complexes

PA BASF A.-G., Germany

SO Ger. Offen., 18 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10240577	A1	20040311	DE 2002-10240577	20020829 <--
	WO 2004020478	A1	20040311	WO 2003-EP8091	20030724 <--
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	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW:				
	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2003250152	A1	20040319	AU 2003-250152	20030724 <--
	EP 1537150	A1	20050608	EP 2003-790811	20030724 <--
	R:				
	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

JP	2005536609	T2	20051202	JP	2004-531814	20030724 <--
US	2005250920	A1	20051110	US	2005-524216	20050210 <--

PRAI DE 2002-10240577 A 20020829 <--
 WO 2003-EP8091 W 20030724 <--

OS MARPAT 140:236209

AB Aqueous polymer dispersions are manufactured by polymerization of olefins in the presence of complexes of Group 7-10 metals and azo or azomethine compds. having aromatic rings attach to both ends of the azo or azomethine group. A typical catalyst was manufactured by reaction of 2,6-bis[3,5-bis(trifluoromethyl)phenyl]aniline with 3,5-diiodo-2-hydroxybenzaldehyde and complexation of the resulting salicylaldehyde ligand with tetramethylethylenediaminedimethylnickel.

IC ICM C08F0004-06
 ICS C08F0004-26; C08F0002-16; C08F0010-00

CC 35-3 (Chemistry of Synthetic High Polymers)
 Section cross-reference(s): 67

IT **Polyolefins**
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (production of aqueous polyolefin dispersions by polymerization of olefins in presence of transition metal complexes of azo or azomethine compds.)

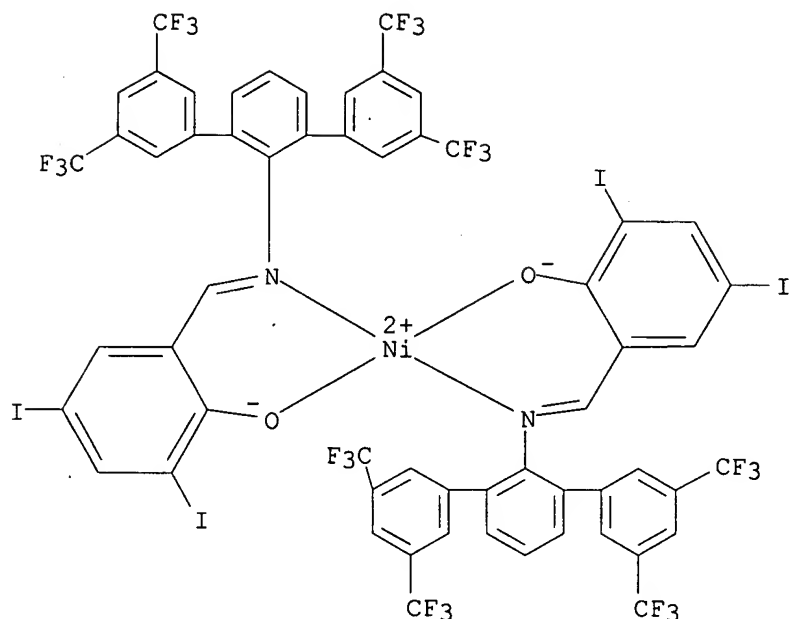
IT **667938-71-8P**
 RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation);
 USES (Uses)
 (production of aqueous polyolefin dispersions by polymerization of olefins in presence of transition metal complexes of azo or azomethine compds.)

IT **9002-88-4P**, Polyethylene
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (production of aqueous polyolefin dispersions by polymerization of olefins in presence of transition metal complexes of azo or azomethine compds.)

IT **667938-71-8P**
 RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation);
 USES (Uses)
 (production of aqueous polyolefin dispersions by polymerization of olefins in presence of transition metal complexes of azo or azomethine compds.)

RN 667938-71-8 HCAPLUS

CN Nickel, bis[2,4-diiodo-6-[[[3,3',5,5'-tetrakis(trifluoromethyl)[1,1':3',1''-terphenyl]-2'-yl]imino-κN]methyl]phenolato-κO]- (9CI) (CA INDEX NAME)



IT 9002-88-4P, Polyethylene

RL: IMF (Industrial manufacture); PREP (Preparation)

(production of aqueous polyolefin dispersions by polymerization of olefins in presence

of transition metal complexes of azo or azomethine compds.)

RN 9002-88-4 HCAPLUS

CN Ethene, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 74-85-1

CMF C2 H4

H₂C=CH₂

L61 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2001:47871 HCAPLUS

DN 134:231136

TI Polymetallic complexes, part LXXIII: complex of Co(II), Ni(II), Cu(II), Zn(II), Cd(II), Hg(II), Mn(II) and Fe(II) with NOON donor bis-bidentate chelating azo dye ligands

AU Mahapatra, Bipin Bihari; Sendha, R. K.

CS Department of Chemistry, G.M. Autonomous College, Sambalpur, 768 004, India

SO Asian Journal of Chemistry (2000), 12(4), 1061-1066

CODEN: AJCHEW; ISSN: 0970-7077

PB Asian Journal of Chemistry

DT Journal

LA English

OS CASREACT 134:231136

AB Sixteen dinuclear metal complexes [M₂(L/L')Cl₂(H₂O)₆] and [M'₂(L/L')Cl₂(H₂O)₂] were synthesized, where LH₂ = 3,3'-di-(phenylazo)-di-

β -naphthol, $L'H_2 = 3,3'$ -di-(p-sulfonatophenylazo)-di- β -naphthol, $M = Mn(II)$ $Fe(II)$, $Co(II)$, $Cu(II)$, $Zn(II)$ and $M' = Ni(II)$, $Cd(II)$, $Hg(II)$. The complexes of the former category are either octahedral or distorted octahedral. The $Ni(II)$ complexes are square planar whereas $Cd(II)$ and $Hg(II)$ complexes possess a tetrahedral geometry around the metal ions. The characterization of ligands and the complexes is made based upon anal., conductance, magnetic susceptibility, IR, electronic, NMR and ESR spectra and x-ray data. Both the azo dyes behave as bis-bidentate ligands and are coordinated to two metal ions favoring the formation of dinuclear complexes.

CC 78-7 (Inorganic Chemicals and Reactions)

Section cross-reference(s): 75

IT 329742-74-7P 329742-75-8P 329742-77-0P 329742-78-1P
329742-79-2P 329742-80-5P 329742-81-6P 329742-82-7P
329742-83-8P 329742-84-9P 329742-85-0P 329742-86-1P
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(preparation of)

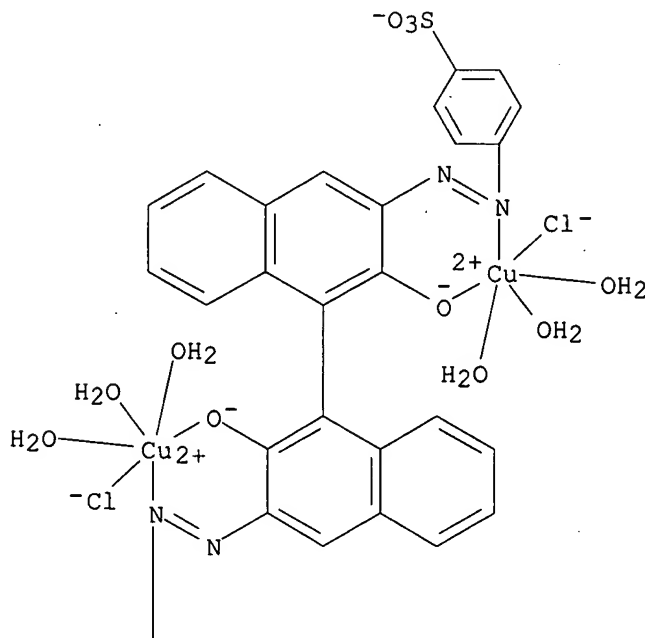
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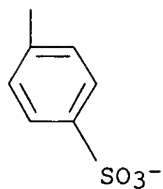
RN 329742-75-8 HCAPLUS

CN Cuprate(2-), hexaaquadichloro[μ -[[4,4'-[[2,2'-di(hydroxy- κO)[1,1'-binaphthalene]-3,3'-diyl]bis(azo- $\kappa N1$)]bis[benzenesulfonato]](4-))]di-, dihydrogen (9CI) (CA INDEX NAME)

PAGE 1-A

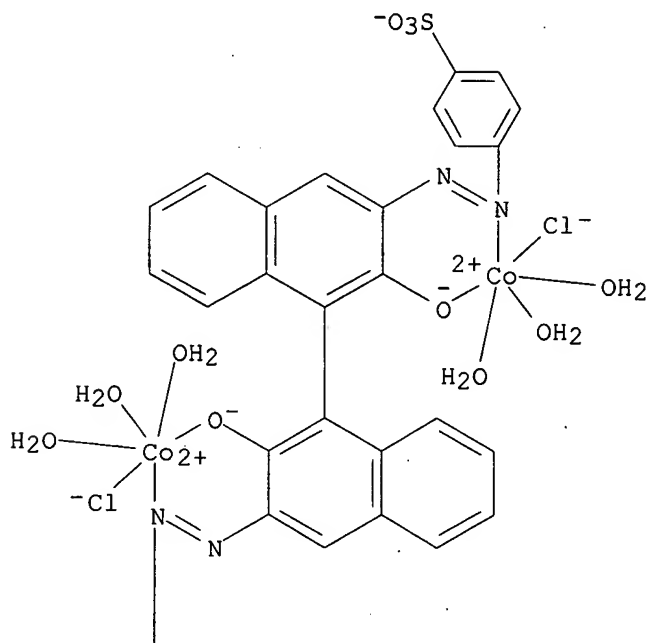


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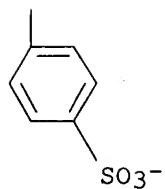
● 2 H⁺

RN 329742-77-0 HCAPLUS
 CN Cobaltate(2-), hexaaquadichloro[μ-[4,4'-[[2,2'-di(hydroxy-κO)[1,1'-binaphthalene]-3,3'-diyl]bis(azo-κN1)]bis[benzenesulfonato]](4-)]di-, dihydrogen (9CI) (CA INDEX NAME)

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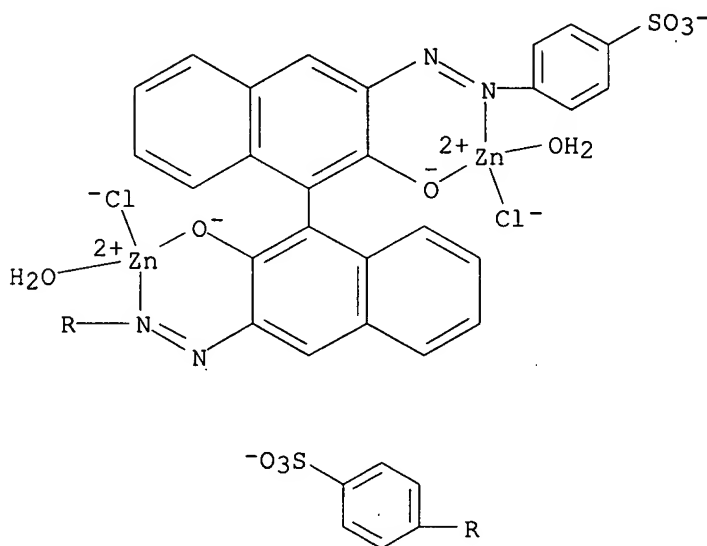


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● 2 H⁺

RN 329742-79-2 HCAPLUS
 CN Zincate(2-), diaquadichloro[μ-[4,4'-[[2,2'-di(hydroxy-κO)[1,1'-binaphthalene]-3,3'-diyl]bis(azo-κN1)]bis[benzenesulfonato]](4-)]di-, dihydrogen, tetrahydrate (9CI) (CA INDEX NAME)

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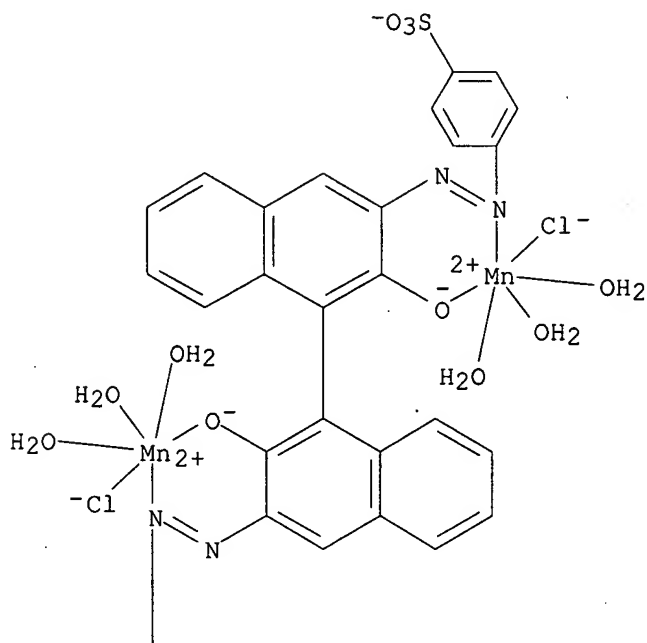
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● 2 H⁺● 4 H₂O

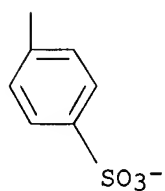
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κN1)]bis[benzenesulfonato]](4-)]di-, dihydrogen (9CI) (CA INDEX NAME)

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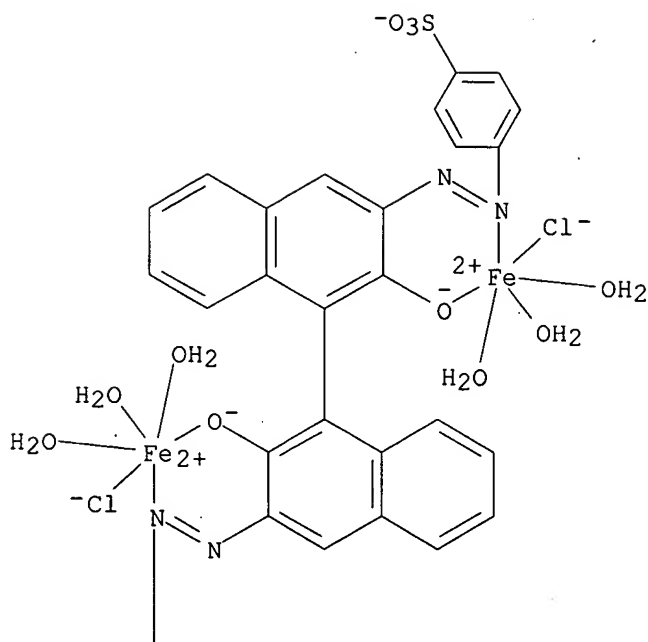
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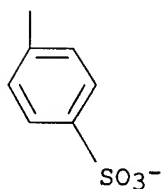
● 2 H⁺

RN 329742-83-8 HCAPLUS
 CN Ferrate(2-), hexaaquadichloro[μ-[[4,4'-[[2,2'-di(hydroxy-κO)[1,1'-binaphthalene]-3,3'-diyl]bis(azo-κN1)]bis[benzenesulfonato]](4-)]di-, dihydrogen (9CI) (CA INDEX NAME)

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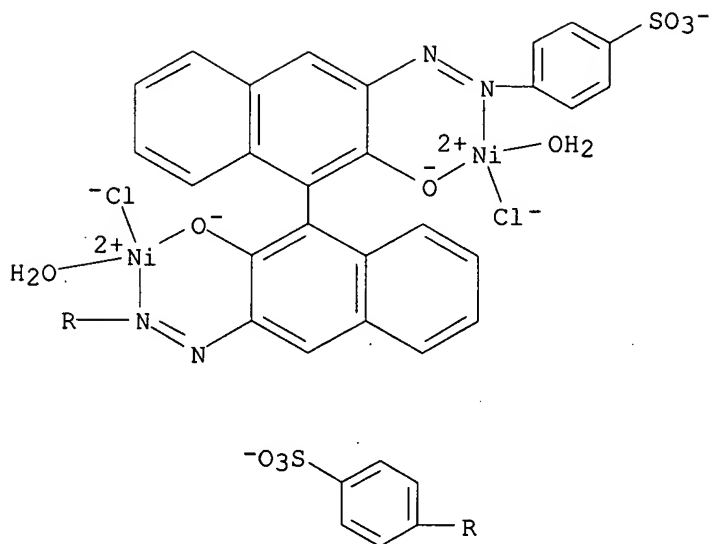


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● 2 H⁺

RN 329742-85-0 HCAPLUS
 CN Nickelate(2-), diaquadichloro[μ-[4,4'-[[2,2'-di(hydroxy-κO)[1,1'-binaphthalene]-3,3'-diyl]bis(azo-κN1)]bis[benzenesulfonato]](4-)]dihydrogen (9CI) (CA INDEX NAME)

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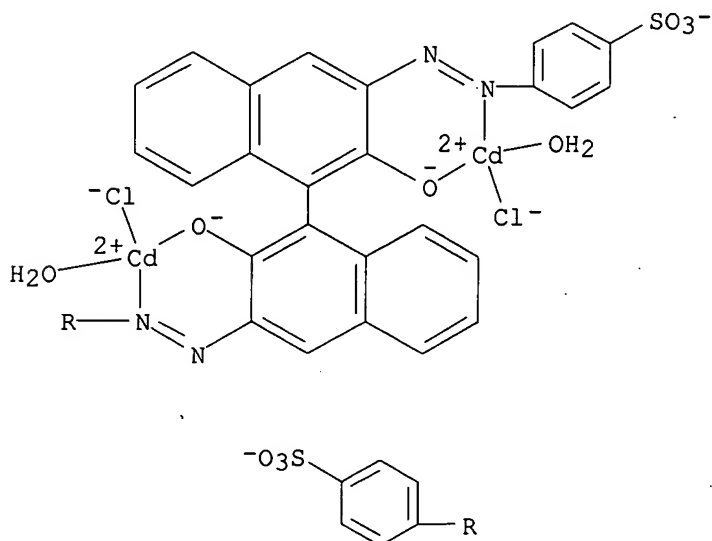


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● 2 H^+

RN 329742-87-2 HCAPLUS
 CN Cadmate(2-), diaquadichloro[μ-[[4,4'-[[2,2'-di(hydroxy-κO)[1,1'-binaphthalene]-3,3'-diyl]bis(azo-κN1)]bis[benzenesulfonato]](4-)]di-, dihydrogen (9CI) (CA INDEX NAME)

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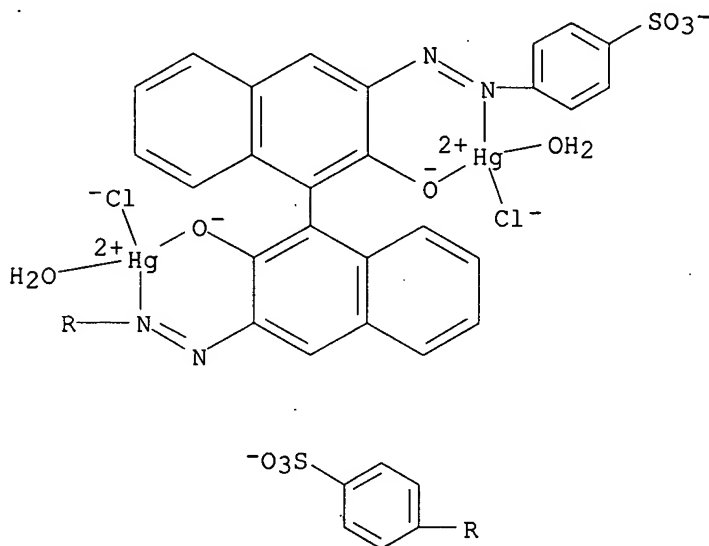


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● 2 H⁺

RN 329742-89-4 HCAPLUS
 CN Mercurate(2-), diaquadichloro[μ-[[4,4'-[[2,2'-di(hydroxy-κO)[1,1'-binaphthalene]-3,3'-diyl]bis(azo-κN1)]bis[benzenesulfonato]](4-))]di-, dihydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

● 2 H⁺

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Agamber, C	1967		896	J Chem Soc (A)	
Butucelia, A					HCAPLUS
Carlin, R	1965	1	19	Stereochemistry of C	
Cotton, F	1985		867	Advanced Inorganic C	
Ferraro, J	1971			Low Frequency Vibrat	
Gaind, K	1966	28	272	Indian J Pharma	HCAPLUS
Gamo, I	1961	34	760	Bull Chem Soc	HCAPLUS
Ginsberg, A	1967	29	353	J Inorg Nucl Chem	HCAPLUS
Goodman, L	1970		11	The Pharmacological	
Hathway, B	1968		1678	J Chem Soc (A)	
Hathway, B	1968		1905	J Chem Soc (A)	
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Jairama	1986	25A	183	Indian J Chem	
Johnson, J	1985	80	6471	J Am Chem Soc	
Khanna, S	1964	26	34	Indian J Pharma	
King, R	1966	5	300	Inorg Chem	HCAPLUS

Kneubuhl, F	1960	33	J Chem Phys	
Lever, A	1960 3	1074	Coord Chem Rev	
Lever, A	1968		Inorganic Electronic	
Lever, A	1967	2041	J Chem Soc (A)	HCAPLUS
Mahapatra, B	1987 124	387	Acta Chim Hung	HCAPLUS
Mahapatra, B	1991 68	542	J Indian Chem Soc	HCAPLUS
Mahapatra, B	1995 72	395	J Indian Chem Soc	HCAPLUS
Mahapatra, B	1995 72	721	J Indian Chem Soc	HCAPLUS
Mahapatra, B	1988 18	95	Synth React Inorg Me	
Mishra, L	1981 28A	883	Indian J Chem	
Nakamoto, K	1963		Infrared Spectra of	
Peisach, J	1969	71	EPR of Metal Complex	HCAPLUS
Yamada, S	1966 1	415	Coord Chem Rev	HCAPLUS

L61 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:689212 HCAPLUS

DN 134:125136

TI Polymetallic complexes of cobalt(II), nickel(II), copper(II), zinc(II) cadmium(II) and mercury(II) with bis-bidentate chelating azo dye ligand

AU Mahapatra, B. B.; Mishra, R. R.

CS Post Graduate Department of Chemistry, G. M. Autonomous College, Sambalpur, 768 004, India

SO Ultra Scientist of Physical Sciences (2000), 12(2), 253-255
CODEN: USPSE5

PB Ultra Scientist of Physical Sciences

DT Journal

LA English

OS CASREACT 134:125136

AB [M₂LC12(H₂O)₆] (M = Co, Cu) and [M₂LC12(H₂O)₂] (M = Ni, Zn, Cd, and Hg; H₂L = 3,3'-bis(naphthylazo)-2,2'-dihydroxydinaphthalene, a bis-bidentate chelating azo dye ligand having NO-ON donor atoms) were synthesized. The ligand is bonded to the metal ions through two phenolic and two azo nitrogen atoms. The characterization of the complexes is based upon elemental anal., magnetic moment measurement, conductivity measurement, IR, electronic and NMR spectral data. The Co(II) complex is octahedral, Cu(II) complex distorted octahedral, Ni(II) complex square planar and the Zn(II), Cd(II) and Hg(II) complexes are ascribed to possess tetrahedral stereochem.

CC 78-7 (Inorganic Chemicals and Reactions)

Section cross-reference(s): 25, 41

IT 321558-33-2P 321558-35-4P 321558-38-7P

321558-39-8P 321558-40-1P 321558-41-2P

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(preparation of)

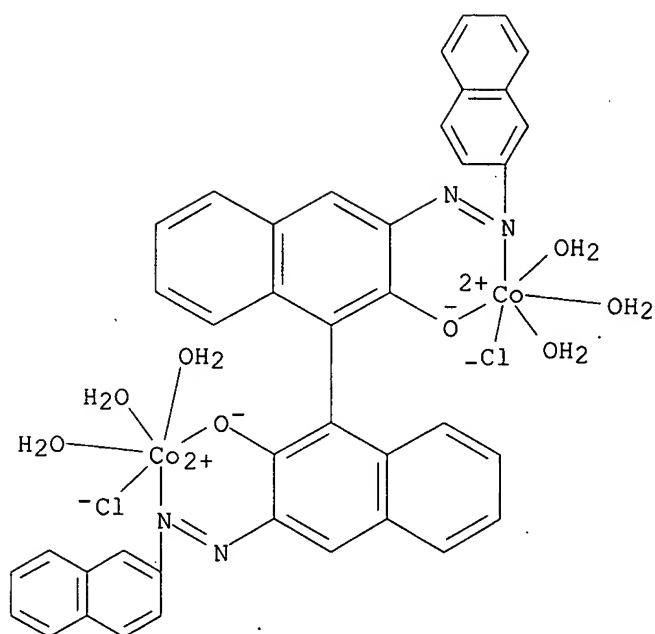
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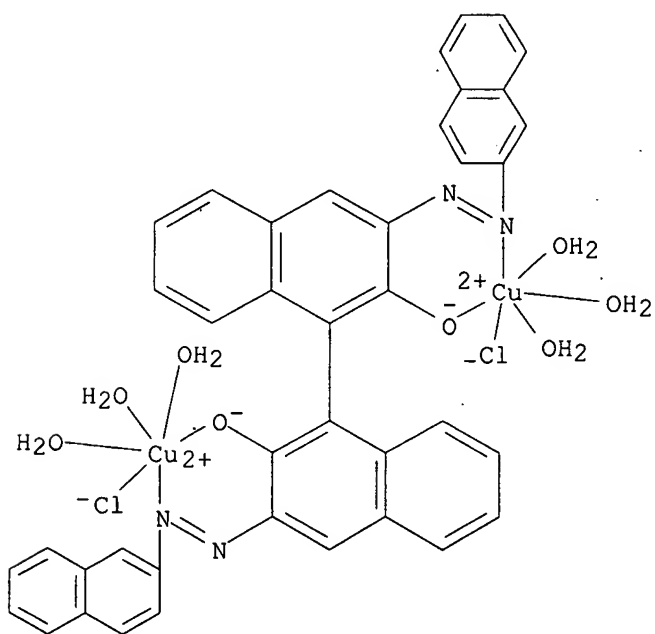
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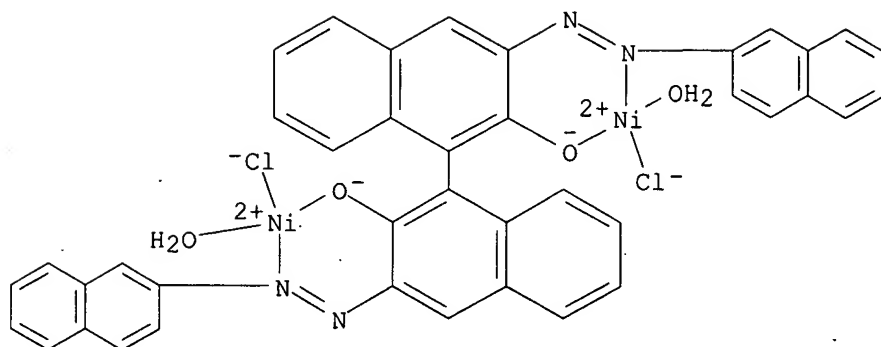
CN Copper, hexaaqua[μ-[3,3'-bis(2-naphthalenylazo-κN2)[1,1'-binaphthalene]-2,2'-diolato(2-)-κO:κO']]dichlorodi- (9CI) (CA INDEX NAME)



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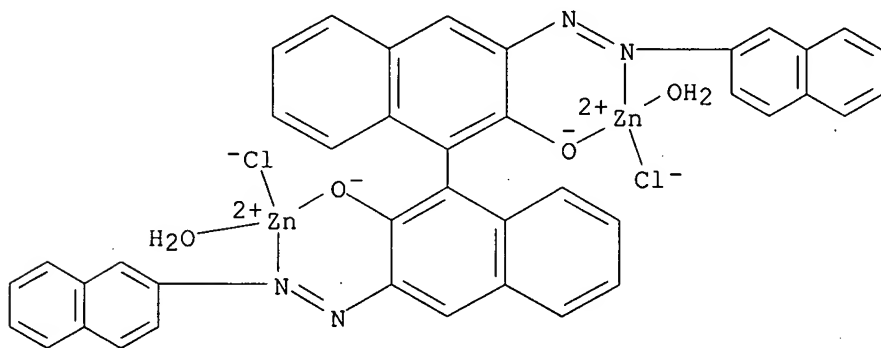
CN Nickel, diaqua[μ-[3,3'-bis(2-naphthalenylazo-κN2)[1,1'-binaphthalene]-2,2'-diolato(2-)-κO:κO']]dichlorodi- (9CI) (CA INDEX NAME)

INDEX NAME)



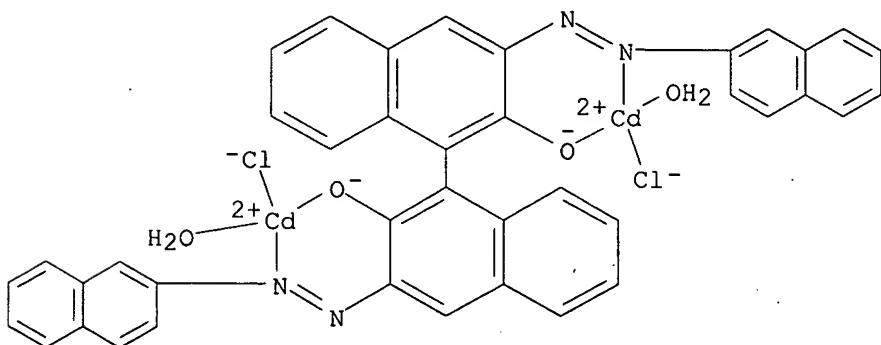
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CN Zinc, diaqua[μ-[3,3'-bis(2-naphthalenylazo-κN2)[1,1'-binaphthalene]-2,2'-diolato(2-)-κO:κO']]dichlorodi- (9CI) (CA
INDEX NAME)

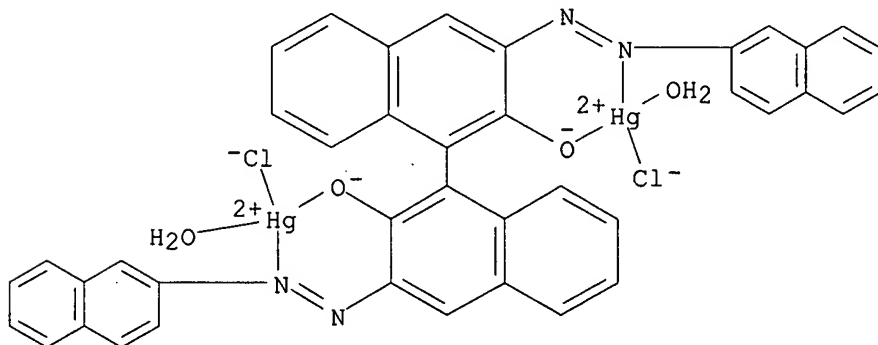


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CN Cadmium, diaqua[μ-[3,3'-bis(2-naphthalenylazo-κN2)[1,1'-binaphthalene]-2,2'-diolato(2-)-κO:κO']]dichlorodi- (9CI) (CA
INDEX NAME)



RN 321558-41-2 HCAPLUS
 CN Mercury, diaqua[μ -{3,3'-bis(2-naphthalenylazo- κ N2)[1,1'-binaphthalene]-2,2'-diolato(2-)- κ O: κ O'}]]dichlorodi- (9CI) (CA
 INDEX NAME)



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Cotton, F	1985			Advanced Inorganic C	
Gamo, I	1961	34	760	Bull Chem Soc	HCAPLUS
Hathway, B	1968		1978	J Chem Soc A	
King, R	1966	5	300	Inorg Chem	HCAPLUS
Lever, A	1960	3	1074	Coordination Chemist	
Mishra, L	1981	A28	883	Ind J Chem Soc	
Mohapatra, B	1987	124	387	Acta Chem Hung	
Mohapatra, B	1997	9	1759	Asian J Chem	
Mohapatra, B	1991	68	542	J Ind Chem Soc	
Mohapatra, B	1995	72	395	J Ind Chem Soc	
Mohapatra, B	1995	72	721	J Ind, Chem Soc	
Mohapatra, B	1988	18	95	Synth React Inorg Me	
Nakamoto, K	1963			Bull Chem Soc	
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 E MUBARIK/AU
 E MAHMOOD/AU
 E MAHMOOD C/AU
 E MAHMOOD M/AU
 L3 28 S E3
 E SCHMID/AU
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 L4 9 S E3
 E SCHMID M/AU

L5 526 S E3-E15,E30-E32
 E PREISHUBER/AU
 L6 27 S E4,E7-E12
 E PREISHUEBER/AU
 E PFLUGL/AU
 E SAVA/AU
 E SAVA X/AU
 L7 23 S E4
 E WEISS/AU
 L8 17 S E3
 E WEISS H/AU
 L9 624 S E3-E19
 E WEISS HORST/AU
 L10 67 S E3
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 E MECKING/AU
 L11 95 S E24,E27,E28
 E ZUIDEVELD/AU
 L12 21 S E7-E9
 E BAUERS/AU
 L13 18 S E5-E7
 L14 63 S L2-L13 AND BASF?/PA,CS
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 E GROUP VIII/CT
 E E35+ALL
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